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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/750,820

01/05/2004

Yasutoshi Inoue

SON-2897

1638

23353 7590 10/30/2007  
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EXAMINER

MERCEDES, DISMERY E

ART UNIT

PAPER NUMBER

2627

MAIL DATE

DELIVERY MODE

10/30/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/750,820	<b>Applicant(s)</b> INOUE ET AL.	
	<b>Examiner</b> Dismery E. Mercedes	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 7/10/2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1,5,9 have been considered but are moot in view of the new ground(s) of rejection.
2. The Examiner noted that in the Amendment filed 7/10/2007, the wrong serial number of the application has been inserted 11/044,277. The serial number corresponding to this amendment should be 10/750,820. Please appropriate correction is required.

### *Drawings*

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the Drawings submitted in amendment filed 7/10/2007 are not in English. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,5,9 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikuri (US 6,473,273).

As to Claim 5, Kikuri discloses a magnetic recording and reproducing apparatus for performing azimuth recording on a tape form recording medium by a plurality of recording heads, said system comprising a head system having a plurality of said recording heads, and a tape feeding means for feeding said tape form recording medium, wherein said head system comprises a first recording head including a plurality of magnetic gaps having a first azimuth angle (fig.6B H1), and a second recording head including a plurality of magnetic gaps having a second azimuth angle different from said first azimuth angle (fig.6B, H2); a positional relationship between said magnetic gaps is so determined that in relation to each magnetization pattern formed on said tape formed on said recording medium by said magnetic gaps of said first recording head, side edge portions in the formation direction of said patterns are overwritten by said magnetic gaps of said second recording head (figs.6B,7-8 wherein the tracks are overlapped by the magnetic gaps of the opposite head), wherein said first and second recording heads are thin-film heads and a single head chip constituting each said recording head is provided with a plurality of magnetic gaps and wherein said first and second recording heads are mounted on a rotary drum (fig.6A-B, and col.1, lines 22-33; col.2, line 63-col.3, line 5; col.3, lines 49-52 wherein thin film heads are mounted on a rotary drum and wherein using thin film heads in single chip structure is well known in the art), and each of said magnetization patterns formed on said recording medium is an inclined track (col.2, lines 13-36; col.4, lines 14-20 wherein magnetization patterns on the medium are inclined tracks).

As to Claim 1 has the same limitations as to those treated in the above rejection of claim 5, and are met by the reference as discussed above

As to Claim 9 is a method claim drawn to the apparatus of claim 5 and is rejected for the same reasons of anticipation as set forth in the rejection of claim 5 above.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2,6,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuri (US 6,473,273) in view of Watanabe et al. (US 6,6014,291).

As to Claim 6, Kikuri discloses the apparatus of claim 5, but fails to specifically disclose said overwriting is conducted with such a positional relationship that a side edge portion of said magnetization pattern in the formation direction of said magnetization pattern formed by each said magnetic gap of said first recording head coincides substantially with the center of each magnetization pattern formed by said second recording head. However, Watanabe et al. is relied upon for disclosing such (fig. 42, and disclosure thereof and col. 1, lines 43-54 and col. 2, lines 56-59; col.16, lines 35-44 wherein magnetic gaps of the heads are substantially aligned with the center of the inclined tracks). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify rotary head assembly as disclosed by Kikuri with the above teachings from Watanabe the motivation being for controlling the amount of overlapping to therefore minimize and avoid errors.

As to Claim 10 is a method claim drawn to the apparatus of claim 6 and is rejected for the same reasons of obviousness as set forth in the rejection of claim 6 above.

As to Claim 2 has the same limitations as to those treated in the above rejection of claim 6, and are met by the references as discussed above

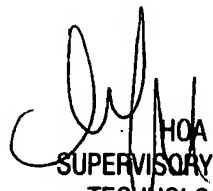
### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
DM

  
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10/25/07